

**CME100A/A****SPECIFICATIONS**

CA846-01-A-B

ITEMS	MODEL	CME100A							
		-5/A	-12/A	-15/A	-18/A	-24/A	-28/A	-36/A	-48/A
1 Nominal Output Voltage	V	5	12	15	18	24	28	36	48
2 Maximum Output Current	A	12	6.7	5.4	4.5	3.4	2.9	2.25	1.7
3 Maximum Output Power	W	60.0	80.4	81.0	81.0	81.6	81.2	81	81.6
4 Efficiency	115/230 VAC (*1)	%	83 / 84	87 / 89	88 / 89	88 / 89	89 / 90	89 / 90	89 / 90
5 Input Voltage Range	(*2)	-			85 - 265 VAC (47-63Hz)				
6 Input Current (Typ.)	115/230 VAC (*1)	A	1.2 / 0.8			1.5 / 0.9			
7 In-rush Current (Typ.)	(*1)(*3)	A			30 / 60 at Cold Start				
8 Output Voltage Range		%				-10 / +10			
9 Maximum Ripple & Noise	(*1)(*4)(*5)	mV	120	120	150	150	150	200	200
10 Maximum Ripple & Noise (0%~35% Load)	(*4)(*5)	mV	240	280	280	280	280	400	400
11 Maximum Line Regulation	(*4)(*6)	mV	20	48	60	72	96	112	144
12 Maximum Load Regulation	(*4)(*7)	mV	40	96	120	144	192	224	288
13 No Load Power Consumption		W			< 0.5 @ 230VAC , Ta=25°C, Nominal Output Voltage				
14 Temperature Coefficient	(*4)	-			Less than 0.02% / °C				
15 Over Current Protection	(*8)	A	>16.9	> 8.7	> 7.0	> 5.8	> 4.4	> 3.7	> 2.9
16 Over Voltage Protection	(*9)	V	5.75 - 7.25	13.8 - 17.4	17.25 - 21.75	20.7 - 26.1	27.6 - 34.8	32.2 - 40.6	41.4 - 52.2
17 Hold-up time (Typ.)	(*1)	ms				15 / 90			
18 Leakage Current	(*10)	-			0.3mA max @265VAC,60Hz				
19 Parallel Operation		-			No				
20 Series Operation		-			Possible				
21 Operating Temperature	(*11)	-			-20°C ~ +70°C				
22 Operating Humidity		-			10 - 90%RH (No condensing)				
23 Storage Temperature		-			-40°C ~ +85°C				
24 Storage Humidity		-			10 - 90%RH (No condensing)				
25 Cooling		-			Convection				
26 Withstand Voltage		-			Input-FG : 2kVAC (20mA) 1xMOPP, Input-Output : 4kVAC (20mA) 2xMOPP, Output-FG : 1.5kVAC (20mA) 1xMOPP				
27 Isolation Resistance		-			More than 100MΩ at 25°C,70%RH, Output - FG : 500VDC				
28 Vibration		-			At no operating, 10-500Hz (Sweep for 1min.) Maximum 19.6m/s <sup>2</sup> X,Y,Z 1 hour each				
29 Shock		-			Less than 196m/s <sup>2</sup> and MIL-STD-810F				
30 Safety		-			Approved by IEC/EN62368-1, UL62368-1, CSA62368-1 Approved by IEC/EN60601-1, ES60601-1, CSA-C22.2 No.60601-1				
31 EMI	(*1)	-			Designed to meet EN55011-B, EN55032-B, FCC-Class B				
32 Immunity		-			Designed to meet IEC61000-6-2 IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8, IEC61000-4-11				
33 Weight (Typ.)		g			260				
34 Size ( L x W x H )		mm			125 x 63.1 x 36 (Refer to Outline Drawing)				
35 Line DIP		-			Designed to meet SEMI-F47 (200VAC Line only)				

\*Read instruction manual carefully, before using the power supply unit.

## =NOTES=

\*1. At 115VAC/230VAC, Ta=25°C, nominal output voltage and maximum output power.

\*2. For cases where conformance to various safety specs (UL, CSA, EN) are required, input voltage range will be 100 ~ 240VAC (50-60Hz).

Output derating required when Vin is less than 115VAC, refer output derating curve for details.

\*3. Not applicable for the in-rush current to noise filter for less than 0.2ms.

\*4. Please refer to Fig. A for measurement of Vo, line and load regulation and ripple voltage.

\*5. Ripple &amp; noise are measured at 20MHz by using a 150mm twisted pair of load wires terminated with a 0.1uF and 100uF capacitor.

\*6. 85~265VAC, constant load.

\*7. No load - full load, constant input voltage.

\*8. Hiccup with automatic recovery.

Avoid operating at over load or short circuit condition.

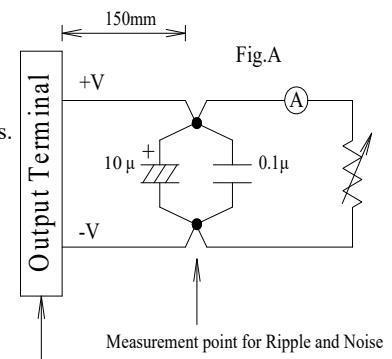
\*9. OVP circuit shut down the output, manual reset (Re power on) to get output voltage.

\*10. Measured by the each measuring method of UL, CSA, and EN (at 60Hz), Ta=25°C.

\*11. Refer to output derating curve for details of output derating versus input voltage, ambient temperature and mounting method.

- Load (%) is percent of maximum output power or maximum output current.

- Do not exceed its derating of maximum Load.



Measurement point for Vo Line/Load Regulation

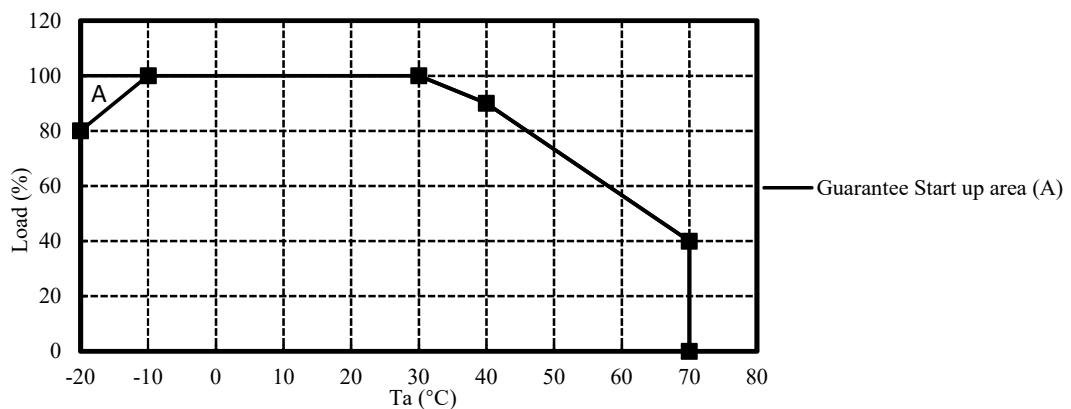
**CME100A/A****OUTPUT DERATING**

CA846-01-02/A

**OUTPUT DERATING VERSUS OPERATING AMBIENT TEMPERATURE (Ta)****1. CME100A-5/A**

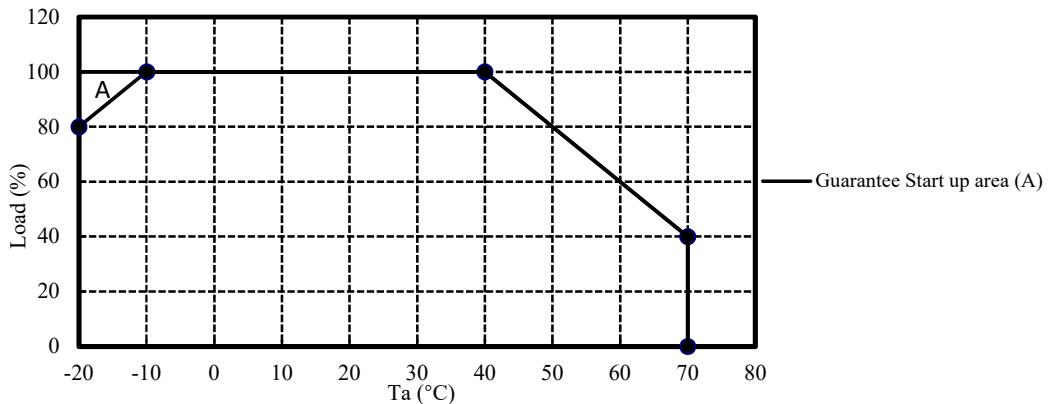
Mounting: A, B, C, D, E

Ta (°C)	Load (%)
-20	80
-10 - 30	100
40	90
70	40

**2. CME100A-12/A, -15/A, -18/A**

Mounting: A, B, C, D, E

Ta (°C)	Load (%)
-20	80
-10 - 40	100
70	40



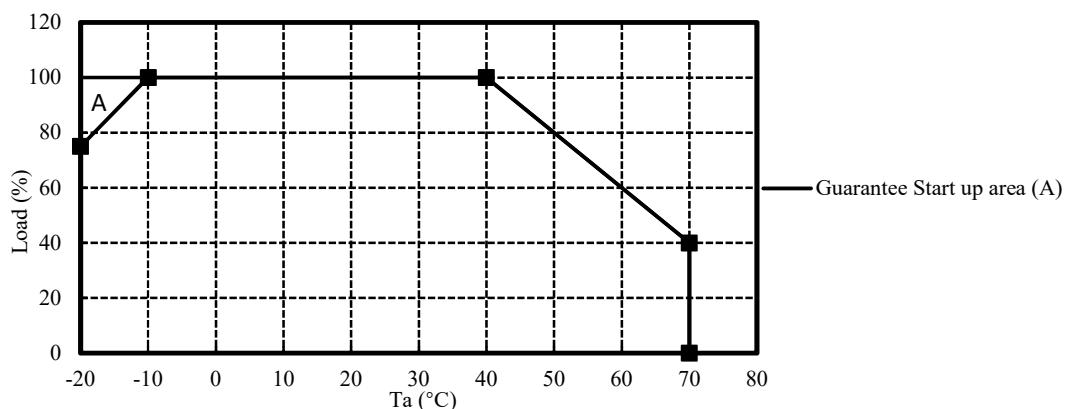
**CME100A/A****OUTPUT DERATING**

CA846-01-03/A

**OUTPUT DERATING VERSUS OPERATING AMBIENT TEMPERATURE (Ta)****3. CME100A-24/A, -28/A, -36/A, -48/A**

Mounting: A, B, C, D, E

Ta (°C)	Load (%)
-20	75
-10 - +40	100
70	40

**• LOW TEMPERATURE START UP**

About Guarantee Start up area (A)

(\*\*\*-01-02/A, \*\*\*-01-03/A)

\*Input voltage : Not gradual start up.

\*Do not use the load that is constant current mode.

\*Avoid forced air cooling. It is assumed that inside of power supply is heated by self-heating within 1 minute.

\*No condensing.

\*About start up of no load and light load.

The output voltage may become unstable when increased load suddenly before warming.

\*Pay attention to above items before using the unit. Incorrect usage could lead to unstable output voltage.

**CME100A/A****OUTPUT DERATING**

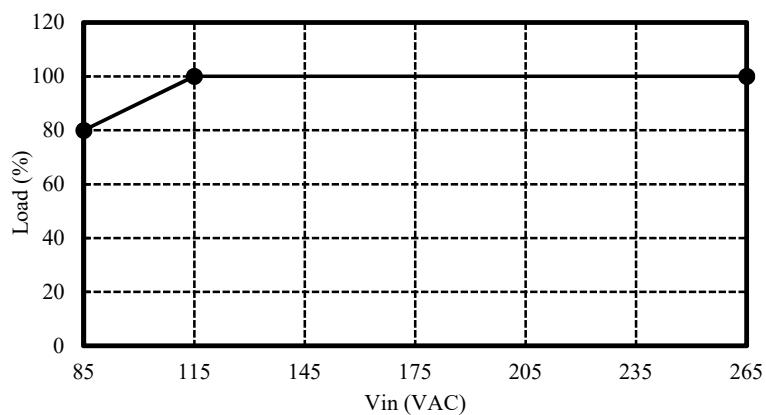
CA846-01-04/A

**OUTPUT DERATING VERSUS INPUT VOLTAGE**

FOR ALL MODELS

Mounting A,B,C,D,E

Input Voltage (VAC)	Load (%)
85	80
115~265	100

**MOUNTING A**  
(STANDARD MOUNTING)**MOUNTING B****MOUNTING C****MOUNTING D****MOUNTING E**